

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A media source (101; 400)
 - being capable of sending out time-stamped media data packets (1021, 1022; 308; 610S, 610R; 76, 77), in particular to one or more receiving media sink(s) (1, 2; 4021, 4022; 71, 72) ~~according to anyone of claims 5 to 9,~~
 - being adapted for
 - determining a play-out time offset (604R),
 - precisely determining a global wallclock time (201),
 - determining a common play-out time for each received time-stamped media data packet (1021, 1022; 308; 610S, 610R; 76, 77) by adding the time indicated by the timestamp (611R) of said timestamped media data packet (1021, 1022; 308; 610S, 610R; 76, 77) and said play-out time offset (604R), and
 - playing-out each received time-stamped media data packet (1021, 1022; 308; 610S, 610R; 76, 77) exactly when the determined common play-out time for the received time-stamped media data packet (1021, 1022; 308; 610S, 610R; 76, 77) is reached, the timestamp (611S) of each media data packet (1021, 1022; 308; 610S, 610R; 76, 77) being indicative for the time of creation of the respective media data packet (1021, 1022; 308; 610S, 610R; 76, 77),
 - being adapted for determining a play-out time offset (604S), and
 - being adapted for sending out the play-out time offset (604S), in particular to said one or more receiving media sink(s) (1, 2; 4021, 4022; 71, 72) ~~according to anyone of claims 5 to 9.~~

- a sample clock being capable of determining a sample clock time,
 - being capable of determining a global wallclock time (201), and
 - being adapted for sending out a control packet (606S) once in a while, in particular to
 said one or more receiving media sink(s) (1, 2; 4021, 4022; 71, 72) ~~according to anyone of~~
~~claims 5 to 9~~, said control packet (606S) comprising two control packet timestamps indicating
 the same moment in time, the first control packet timestamp (608S) of which being measured or
 defined in time units of said global wallclock time (201), the second control packet timestamp
 (607S) of which being measured or defined in time units of said sample clock time.

3. (Currently Amended) The media source (101; 400) according to claim 1 ~~or 2~~,

characterized in that

said timestamp (611S) of a media data packet (1021, 1022; 308; 610S, 610R; 76, 77) is
 indicative for the time of creation of said time-stamped media data packet (1021, 1022; 308;
 610S, 610R; 76, 77) in time units of said sample clock time.

4. (Currently Amended) The media source (101; 400) according to ~~anyone of the preceding~~
~~claims~~ claim 1,

which is designed for sending out the same media data packets (1021, 1022; 308; 610S,
 610R; 76, 77) to two or more different receiving media sinks (1, 2; 4021, 4022; 71, 72).

5. (Currently Amended) A media sink (1, 2; 4021, 4022; 71, 72)

- adapted for receiving time-stamped media data packets (1021, 1022; 308; 610S, 610R;
 76, 77), in particular from a media source (101; 400) ~~according to anyone of claims 1 to 4~~,
 - capable of sending out time-stamped media data packets (1021, 1022; 308; 610S, 610R;
76, 77), to one or more receiving media sink(s) (1, 2; 4021, 4022; 71, 72), the timestamp (611S)

of each media data packet (1021, 1022; 308; 610S, 610R; 76, 77) being indicative for the time of creation of the respective media data packet (1021, 1022; 308; 610S, 610R; 76, 77),

- being adapted for determining a play-out time offset (604S), and
- being adapted for sending out the play-out time offset (604S), in particular to said one or more receiving media sink(s) (1, 2; 4021, 4022; 71, 72)

being adapted for

- determining a play-out time offset (604R),
- precisely determining a global wallclock time (201),
- determining a common play-out time for each received time-stamped media data packet (1021, 1022; 308; 610S, 610R; 76, 77) by adding the time indicated by the timestamp (611R) of said timestamped media data packet (1021, 1022; 308; 610S, 610R; 76, 77) and said play-out time offset (604R), and

- playing-out each received time-stamped media data packet (1021, 1022; 308; 610S, 610R; 76, 77) exactly when the determined common play-out time for the received time-stamped media data packet (1021, 1022; 308; 610S, 610R; 76, 77) is reached.

6. (Currently Amended) The media sink (1, 2; 4021, 4022; 71, 72) according to claim 5, which is adapted for receiving said play-out time offset (604R) once, in particular from a said media source (101; 400) according to anyone of claims 1 to 4.

7. (Currently Amended) The media sink (1, 2; 4021, 4022; 71, 72) according to claim 5, which is adapted for negotiating said play-out time offset (604R) with at least one other said media sink (1, 2; 4021, 4022; 71, 72) according to claim 5 or 6.

8. (Currently Amended) The media sink (1, 2; 4021, 4022; 71, 72) according to anyone of claims 5 to 7 claim 5,

characterized by

being capable of

- receiving a control packet (606R), in particular from a said media source (101; 400),

~~according to anyone of claims 1 to 4~~, containing a first control packet timestamp (608R)

indicating a certain moment in time measured or defined in time units of a sample clock time and a second control packet timestamp (607R) indicating the same certain moment in time measured or defined in time units of a global wallclock time (201), and of

- converting a time indicated by a timestamp (611R) of a time-stamped media data packet

(1021, 1022; 308; 610S, 610R; 76, 77) measured or defined in units of a sample clock time into a time measured or defined in units of a global wallclock time (201), based on the information of the first and second control packet timestamp.

9. (Currently Amended) The media sink (1, 2; 4021, 4022; 71, 72) according to ~~anyone of claims 5 to 8~~ claim 5,

characterized by

a buffer which is adapted for storing media data packets (1021, 1022; 308; 610S, 610R;

76, 77) until said common play-out time is reached.

10. (Currently Amended) A media processing system

characterized by

a media source (101; 400) according to ~~anyone of claims 1 to 4~~

- capable of sending out time-stamped media data packets (1021, 1022; 308; 610S, 610R;

76, 77), to one or more receiving media sink(s) (1, 2; 4021, 4022; 71, 72), the timestamp (611S)
of each media data packet (1021, 1022; 308; 610S, 610R; 76, 77) being indicative for the time of
creation of the respective media data packet (1021, 1022; 308; 610S, 610R; 76, 77),

- being adapted for determining a play-out time offset (604S), and
- being adapted for sending out the play-out time offset (604S), in particular to said one
or more receiving media sink(s) (1, 2; 4021, 4022; 71, 72)

and a media sink (1, 2; 4021, 4022; 71, 72) according to anyone of claims 5 to 9

being adapted for
- determining a play-out time offset (604R),
- precisely determining a global wallclock time (201),
- determining a common play-out time for each received time-stamped media data packet
(1021, 1022; 308; 610S, 610R; 76, 77) by adding the time indicated by the timestamp (611R) of
said timestamped media data packet (1021, 1022; 308; 610S, 610R; 76, 77) and said play-out
time offset (604R), and
- playing-out each received time-stamped media data packet (1021, 1022; 308; 610S,
610R; 76, 77) exactly when the determined common play-out time for the received time-stamped
media data packet (1021, 1022; 308; 610S, 610R; 76, 77) is reached.

11. (Original) A media source (501)

- being adapted for determining a play-out time offset and for determining a common
 play-out time by adding the determined play-out time offset to a current time, and
 - being adapted for sending out time-stamped media data packets (511) to one or more
 receiving media sink(s) (502), the timestamp (512) of a time-stamped media data packet (511)
 being indicative for said common play-out time of the media data packet.

12. (Original) The media source (501) according to claim 11,

characterized by

- a sample clock being capable of determining a sample clock time, and

- being adapted for calculating said current time by reading a global wallclock time (201) only once and adding time periods given by said sample clock to the only once read global wallclock time (201).

13. (Currently Amended) The media source (501) according to claim 11 or 12, which is adapted for sending out the same media data packets (511) to two or more different receiving media sinks (502).

14. (Currently Amended) A media sink (502) being adapted for receiving time-stamped media data packets (514), in particular from a media source (501) according to ~~anyone of claims 11 to 13~~ claim 11, and being capable of

- precisely determining a global wallclock time (201), and
- determining a common play-out time for each received time-stamped media data packet (514) which is the time indicated by the timestamp (515) of the time-stamped media data packet (514).

15. (Original) The media sink (502) according to claim 14,
characterized by
a buffer which is adapted for storing media data packets (514) until said common play-out time is reached.

16. (Currently Amended) A media processing system
characterized by
a media source (501) according to ~~anyone of claims 11 to 13~~
- being adapted for determining a play-out time offset and for determining a common play-out time by adding the determined play-out time offset to a current time, and

- being adapted for sending out time-stamped media data packets (511) to one or more receiving media sink(s) (502), the timestamp (512) of a time-stamped media data packet (511) being indicative for said common play-out time of the media data packet and a media sink (502)

being adapted for receiving time-stamped media data packets (514), in particular from said media source (501) and

being capable of

- precisely determining a global wallclock time (201), and
- determining a common play-out time for each received time-stamped media data packet (514) which is the time indicated by the timestamp (515) of the time-stamped media data packet (514).

17. (Currently Amended) A method for playing-out media data packets (1021, 1022; 308; 610S, 610R; 76, 77) synchronously, intended for a media source (101; 400), comprising the following steps

- sending out time-stamped media data packets (1021, 1022; 308; 610S, 610R; 76, 77), in particular to one or more receiving media sink(s) (1, 2; 4021, 4022; 71, 72) according to anyone of claims 5 to 9

being adapted for
- determining a play-out time offset (604R),
- precisely determining a global wallclock time (201),
- determining a common play-out time for each received time-stamped media data packet (1021, 1022; 308; 610S, 610R; 76, 77) by adding the time indicated by the timestamp (611R) of said timestamped media data packet (1021, 1022; 308; 610S, 610R; 76, 77) and said play-out time offset (604R), and

- playing-out each received time-stamped media data packet (1021, 1022; 308; 610S, 610R; 76, 77) exactly when the determined common play-out time for the received time-stamped media data packet (1021, 1022; 308; 610S, 610R; 76, 77) is reached, the timestamp (611S) of each media data packet (1021, 1022; 308; 610S, 610R; 76, 77) being indicative for the time of creation of the respective media data packet (1021, 1022; 308; 610S, 610R; 76, 77),

- determining a play-out time offset (603S), and
- sending out the play-out time offset (604S), in particular to said one or more receiving media sink(s) (1, 2; 4021, 4022; 71, 72) according to anyone of claims 5 to 9.

18. (Currently Amended) The method according to claim 17,

characterized by the following steps,

- determining a sample clock time,
- determining a global wallclock time (201), and
- sending out a control packet (606S) once in a while, in particular to said one or more receiving media sink(s) (1, 2; 4021, 4022; 71, 72) according to anyone of claims 5 to 9, said control packet (606S) comprising two control packet timestamps indicating the same moment in time, the first control packet timestamp (608S) of which being measured or defined in time units of said global wallclock time (201), the second control packet timestamp (607S) of which being measured or defined in time units of said sample clock time.

19. (Currently Amended) The method according to claim 17 or 18,

characterized in that

said timestamp (611S) of a media data packet (1021, 1022; 308; 610S, 610R; 76, 77) is indicative for the time of creation of said time-stamped media data packet (1021, 1022; 308; 610S, 610R; 76, 77) in time units of said sample clock time.

20. (Currently Amended) The method according to ~~anyone of claims 17 to 19~~ claim 17,

characterized by

sending out the same media data packets (1021, 1022; 308; 610S, 610R; 76, 77) to two or more different receiving media sinks (1, 2; 4021, 4022; 71, 72).

21. (Currently Amended) A method for playing-out media data packets (1021, 1022; 308; 610S, 610R; 76, 77) synchronously, intended for a media sink (1, 2; 4021, 4022; 71, 72), comprising the following steps

- receiving time-stamped media data packets (1021, 1022; 308; 610S, 610R; 76, 77), in particular from a media source (101; 400) ~~according to anyone of claims 1 to 4,~~
- capable of sending out time-stamped media data packets (1021, 1022; 308; 610S, 610R; 76, 77), to one or more receiving media sink(s) (1, 2; 4021, 4022; 71, 72), the timestamp (611S) of each media data packet (1021, 1022; 308; 610S, 610R; 76, 77) being indicative for the time of creation of the respective media data packet (1021, 1022; 308; 610S, 610R; 76, 77),
- being adapted for determining a play-out time offset (604S), and
- being adapted for sending out the play-out time offset (604S), in particular to said one or more receiving media sink(s) (1, 2; 4021, 4022; 71, 72)
- determining a play-out time offset (604R),
- precisely determining a global wallclock time (201),
- determining a common play-out time for each received time-stamped media data packet (1021, 1022; 308; 610S, 610R; 76, 77) by adding (614R) the time indicated by the timestamp (611R) of said timestamped media data packet (1021, 1022; 308; 610S, 610R; 76, 77) and said play-out time offset (604R), and

- playing-out each received time-stamped media data packet (1021, 1022; 308; 610S, 610R; 76, 77) exactly when the determined common play-out time for the received time-stamped media data packet (1021, 1022; 308; 610S, 610R; 76, 77) is reached (616R).

22. (Currently Amended) The method according to claim 21,

characterized by the step of

receiving said play-out time offset (604R) once, in particular from a said media source (101; 400) ~~according to anyone of claims 1 to 4.~~

23. (Currently Amended) The method according to claim 21,

characterized by the step of

negotiating said play-out time offset (604R) with at least one other media sink (1, 2; 4021, 4022; 71, 72) ~~according to anyone of claims 5 to 9~~

being adapted for

- determining a play-out time offset (604R),

- precisely determining a global wallclock time (201),

- determining a common play-out time for each received time-stamped media data packet (1021, 1022; 308; 610S, 610R; 76, 77) by adding the time indicated by the timestamp (611R) of said timestamped media data packet (1021, 1022; 308; 610S, 610R; 76, 77) and said play-out time offset (604R), and

- playing-out each received time-stamped media data packet (1021, 1022; 308; 610S, 610R; 76, 77) exactly when the determined common play-out time for the received time-stamped media data packet (1021, 1022; 308; 610S, 610R; 76, 77) is reached.

24. (Currently Amended) The method according to ~~anyone of claims 21 to 23~~ claim 21,

characterized by the following steps,

- receiving a control packet (606S), in particular from a said media source (101; 400) ~~according to anyone of claims 1 to 4~~, containing a first control packet timestamp (608R) indicating a certain moment in time measured or defined in time units of a sample clock time and a second control packet timestamp (607R) indicating the same certain moment in time measured or defined in time units of a global wallclock time (201), and of

- converting a time (613R) indicated by a timestamp (611R) of a time-stamped media data packet (1021, 1022; 308; 610S, 610R; 76, 77) measured or defined in units of a sample clock time into a time measured or defined in units of a global wallclock time (201), based on the information of the first and second control packet timestamp.

25. (Currently Amended) The method according to ~~anyone of claims 21 to 24~~ claim 21,

characterized by the step of

storing media data packets (1021, 1022; 308; 610S, 610R; 76, 77) in a buffer until said common play-out time is reached (615R).

26. (Currently Amended) A method for playing-out media data packets (1021, 1022; 308; 610S, 610R; 76, 77) synchronously, intended for a media processing system,

characterized by

the steps of ~~the method according to anyone of claims 17 to 20~~

- sending out time-stamped media data packets (1021, 1022; 308; 610S, 610R; 76, 77), in particular to one or more receiving media sink(s) (1, 2; 4021, 4022; 71, 72)

being adapted for

- determining a play-out time offset (604R),

- precisely determining a global wallclock time (201),

- determining a common play-out time for each received time-stamped media data packet (1021, 1022; 308; 610S, 610R; 76, 77) by adding the time indicated by the timestamp (611R) of said timestamped media data packet (1021, 1022; 308; 610S, 610R; 76, 77) and said play-out time offset (604R), and
- playing-out each received time-stamped media data packet (1021, 1022; 308; 610S, 610R; 76, 77) exactly when the determined common play-out time for the received time-stamped media data packet (1021, 1022; 308; 610S, 610R; 76, 77) is reached, the timestamp (611S) of each media data packet (1021, 1022; 308; 610S, 610R; 76, 77) being indicative for the time of creation of the respective media data packet (1021, 1022; 308; 610S, 610R; 76, 77),
- determining a play-out time offset (603S), and
- sending out the play-out time offset (604S), in particular to said one or more receiving media sink(s) (1, 2; 4021, 4022; 71, 72) and the steps of the method according to anyone of claims 21 to 25
- receiving time-stamped media data packets (1021, 1022; 308; 610S, 610R; 76, 77), in particular from a media source (101; 400)
- capable of sending out time-stamped media data packets (1021, 1022; 308; 610S, 610R; 76, 77), to one or more receiving media sink(s) (1, 2; 4021, 4022; 71, 72), the timestamp (611S) of each media data packet (1021, 1022; 308; 610S, 610R; 76, 77) being indicative for the time of creation of the respective media data packet (1021, 1022; 308; 610S, 610R; 76, 77),
- being adapted for determining a play-out time offset (604S), and
- being adapted for sending out the play-out time offset (604S), in particular to said one or more receiving media sink(s) (1, 2; 4021, 4022; 71, 72)
- determining a play-out time offset (604R),

- precisely determining a global wallclock time (201),
- determining a common play-out time for each received time-stamped media data packet
(1021, 1022; 308; 610S, 610R; 76, 77) by adding (614R) the time indicated by the timestamp
(611R) of said timestamped media data packet (1021, 1022; 308; 610S, 610R; 76, 77) and said
play-out time offset (604R), and
- playing-out each received time-stamped media data packet (1021, 1022; 308; 610S,
610R; 76, 77) exactly when the determined common play-out time for the received time-stamped
media data packet (1021, 1022; 308; 610S, 610R; 76, 77) is reached (616R).

27. (Currently Amended) A method to enable the synchronous play-out of media data packets (511), intended for a media source (501), comprising the following steps

- determining a play-out time offset and a common play-out time by adding the determined play-out time offset to a current time, and
 - sending out time-stamped media data packets (511), in particular to one or more receiving media sink(s) (502) according to claim 14 ~~or 15~~, the timestamp (512) of a time-stamped media data packet being indicative for said common play-out time of the media data packet.

28. (Original) The method according to claim 27,

characterized by the steps of

- determining a sample clock time, and
 - calculating said current time by reading a global wallclock time (201) only once and adding time periods given by said sample clock to the only once read global wallclock time (201).

29. (Currently Amended) The method according to claim 27 ~~or 28~~,